

Where are the edges of your flesh and who determines them?
Prosthetic, Immersive, and Embodied Performance
by Tara Lee Burns

Introduction

For the past three years, I have embodied a 3D painting environment to re-imagine the purpose of virtual space. In my final year, I began to experiment with alternate modes of dissemination that comment on documentation, artifact, and archive as performance. This research intersects dance with autoethnographic practices, cyborg feminism, digital and 3D cinema, performative drawing, and the phenomenology of the body in Mixed Reality. My questions started as:

- What is real?
- Who is in Control?
- What manifests when attending to the body in *Tilt Brush's* Virtual Reality (VR) environment?

And shifted to:

- What is an embodied practice in a VR environment?
- How is a body in VR perceived by the audience?

It was important research to “stay with the questions” and evolve through iterations of the work to feed unimagined results. In this paper, I will reflect on the process of creating the four components of my thesis including *Extending the Body*—a live performance in and outside of Virtual Reality (VR), *REVEAL*—a dance film, *a canvasUnBound*—a documentation as performance with an interactive system, and *moonshot: solos for your home*—an Augmented Reality (AR) application for the mobile phone.

Something that always made me really anxious as a performer was knowing that I had to complete movements to perfection in the way that someone else had envisioned. The other dancers were counting on me to make the mark. The vision of the choreographer was at stake in my ability to hit a moment of unison with the other dancers, cue another dancer's entrance on my exit, or sync the movement to a music cue in a very ambiguous score. For over 10 years, I worked with choreographer Adele Myers. Six years after my start with her company, she pulled me aside one night and told me that my performance on stage was bolder and more breathtaking since having children. I believe what she was seeing, was a manifestation of letting go of unattainable perfection and thinking in terms of goals and tasks. My priorities had realigned and performing was no longer about the preciousness of achieving the most perfect movement and more about how dance felt in my body. I was no longer concerned with doing it "right" and was excited about how it felt to be in front of a crowd, the length and reach of my limbs extending from my core, and how to make each movement fit inside my frame in a way that made me feel extended and complete. I was no longer interested in executing movements perfectly as if recorded in my body, and I began to question the purpose of live performance. If in live performance we are completing the same composition over and over (as Adele's work demanded), how is that getting at the essence of the live-ness? As I continued to perform, I began to remind myself, "The point of live performance is to be different every time, if not, then why be *live* at all?" This mantra allowed me to nurture my felt experience as a performer, giving me agency to create malleable boundaries between the movements within the choreographer's vision and is at the root of this research.

Extending the Body: live 1performance inside and outside of Virtual Reality (VR)

In a VR environment, the body experiences a wash of something beyond sensation, something unique as if the connection between what your brain sees and what is actually possible is a moment in flux. These felt reactions were what excited me about creating with this new medium when first encountering it. The liminal moments of more than sensation can be described through phenomenology as, “a return to lived experience,” and affect. As Susan Kozel puts it, “affect can refer to the domain of impressions, intuition, memories, imagination, or a feeling that hangs in a room. ...what is conveyed in between the words or gestures. It is the unspoken. Sometimes it falls between the senses or goes beyond them. An exchange of forces between people” (Kozel 2013). When arriving at a practice of embodiment in VR, I was navigating these moments of transition.

There is something that is evoked in improvisation that taps into these transitions. There is always improvisation in performance. In a group of dancers, one person’s unexpected injury can result in a domino effect of individual improvisatory moments to help “the show go on.” More subtly though, a body is different every day—tighter, looser, or perhaps pain where there was none the day before—and even if there is a goal of completing the same dance moves to produce the same choreographic result, the biomechanics of human movement requires remapping to accommodate for the daily differences in our bodies. In addition to the subtle body shifts, performers can also play in these spaces of transition. How does my body react after choosing to look at an audience member who is sleeping? Can a moment of wavering balance turn into a bird about to take flight, or alternately, a hesitancy of character? These performative choices can focus the attention of the performer and change how the performance of choreography is perceived. It is slight, but I believe these moments of agency—the ones where

the performer is in charge of choosing to re-enliven the work from performance to performance—are the improvisatory moments that began to excite me.

There is an agency of actualizing these moments of something more than sensation and when improvising, the choreographic construct is activated by the present moment. Performing improvisation is choreographing while in performance—bringing the process to the stage—a form of process as product. Kent De Spain says in “The Cutting Edge of Awareness,” “...most of the long-time practitioners that I know treat it less as a tool and more as an end in itself.” I define choreography as, determining a distinct series of movements while deciding where the dancer(s) are in time and space in relation to sound, architecture, and each other. Therefore, when improvising, choreography happens in the present moment allowing for the agency of the performer, humanness, and the unique choices that body will make. It’s important to note that the idea of improvisation as choreography is not new. Jonathan Jackson quotes Cynthia Jean Cohen Bull in “Improvisation in African-American Vernacular Dancing,” and states, “Early [modern] choreographers...sought to elevate modern dance to the status of an art form, insisting on a new role for dance in America. Consequently, they...help[ed] to establish a division between improvisation and set choreography.” Jackson goes on to say, “In black vernacular dancing, improvisation means the creative structuring, or the choreographing, of human movement in the moment of ritual performance” (Jackson 2001, 44). My hesitancy to call improvisation choreography before this research was rooted in the deep colonial beliefs Bull mentions and ways of being that have been ingrained in my being in society’s successful attempt to separate classes, races, and cultures. Through a process of unlearning, I have been able to define the parameters of interaction with *and* within Tilt Brush’s VR space and say, “I choreographed the improvisation that made up *Extending the Body*.”

Inhabiting Google's 3D painting program *Tilt Brush*, I followed the felt and residual responses in the body and recorded, then reflected on my experiences. The movement was generated by listening to what arises in the body when seeing, tracing, and walking through the surrounding 3D painting and responding to affective states as well as sensations and emotions. In her lecture, "A Phenomenology in Five Acts," Kozel describes the sensations, emotions, and affective qualities I access when improvising and outlines a method of "phenomenological reflection" which is the process I unknowingly used when practicing the creation of my thesis components (Kozel 2013). For example, I am not simply painting in VR, I am painting with attention to the body's affective qualities and allowing that to interpret the next moment in a reciprocal relationship with the tool. This practice is rooted in phenomenological reflection as well as dance improvisation strategies.

My earliest solo improvisations in VR (Spring 2019's *Tilt World*) focused on guiding movements, tracing the body, creating shelters, and the duality of the virtual and physical world in a Vive Pro Series with Wireless Adapter. Following *Tilt World*, I began experimenting with codified choreography and multiple dancers. My rehearsals with Michelle Sipes and Jacquie Sochacki resulted in aggressive and manipulative improvisations. Jacquie was immersed in VR and instructed to use certain brushes and colors while Michelle mimicked, manipulated, and then dragged her. When rehearsing an improvisation I titled "Smoke and Milk," Jacquie first painted in VR with a brush that emitted a trail of yellow smoke while Michelle repositioned Jacquie's arms. When Jacquie switched brushes to a blue *Neon Pulse*, Michelle switched to instigating the legs. In another improvisation I titled "Aggressive," Michelle is instructed to stop Jacquie from getting away or keep her contained. The shift from guiding to more aggressive and controlling movements was meant to instigate the movement and physicality toward dance. However, when

analyzing the movement, Michelle was in charge of pushing, lifting, moving, and re-directing, until Jacquie eventually resisted and began pushing back.

The underlying narrative that emerged from this improvisational structure seems reflective of those viewed as *Other* (Jacquie in a VR headset) and a person that has taken the role of helping them move through the world (Michelle). The *Othering* Jacquie experienced, surfaced from the appearance and function of the VR headset, but is a product of what Julie Townsend calls “theatrical prosthesis.” In Townsend’s use of the word, she is referring to Loie Fuller’s use of wooden dowels that extend her arms with fabric and electric light. Townsend also argues the impetus behind Fuller’s theatrical prosthesis was meant to augment her body allowing audiences to see her performances as prosthetic transcendence and toe the line between worlds (Townsend 1991). Through this lens, by exploring VR in performance, the representation of the body is associated with a different kind of human or posthuman body. If Donna Haraway means to dissolve the multidisciplinary divide that proposes we are already cyborgs through the dissolution of dualisms between organisms/machine and physical/nonphysical (Haraway 2007, 36-37) and Katherine Hayles argues our cyborg bodies have emerged out of the embodiment of technology and culture (Hayles 1999, 33-34), then the physical representation of donning a VR headset is a cyborg—blending the dualisms that Haraway and Hayles aim to dismantle. Imagining a body as more than human, posthuman, or cyborg allowed me to embrace not only the creation of alternate worlds but alternate bodies.

The attachment and use of VR enhance the ability to transcend the body's limitations and require a phenomenology of moving through the physical and virtual worlds. Having practiced embodiment in VR for almost a year before I enlisted Jacquie and Michelle, I experienced the pull of remembering choreography overpowering the affective state and moved between set and

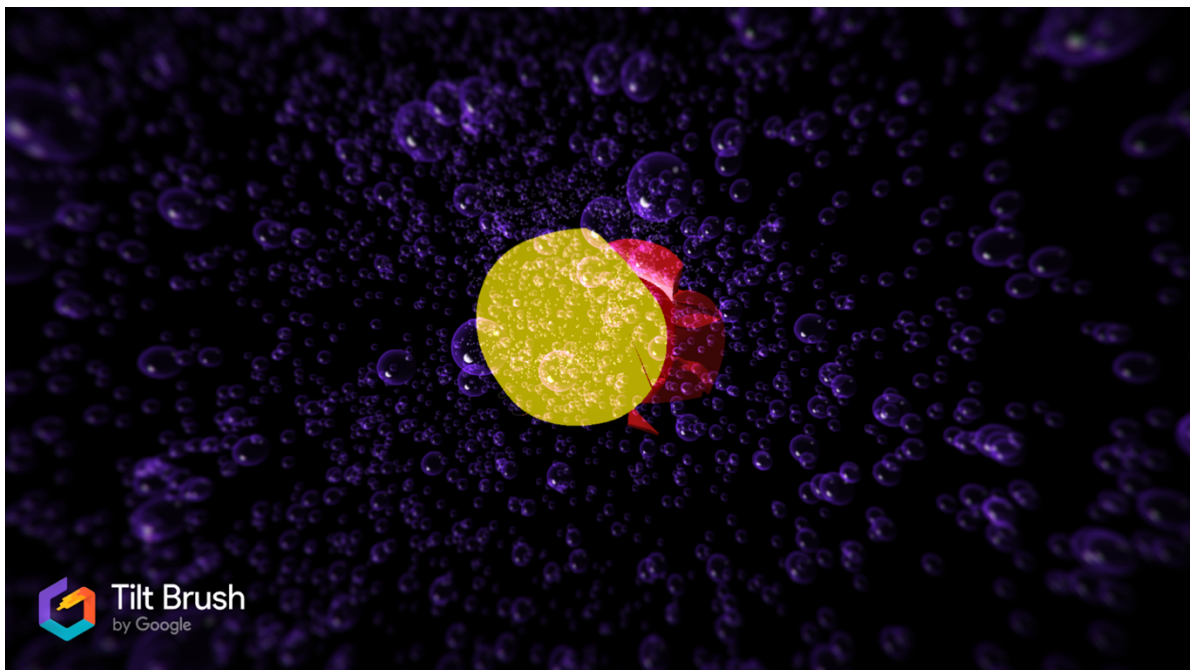
improvised movement—reflecting on the moments between what I was supposed to do and the qualities I felt. When Jacquie began working within the VR device, she was multitasking, not completely immersed, but half in one world and half in the other, and never quite comfortable with the situation. Jacquie’s task was to produce both painted traces and a residual movement from Michelle’s instigations. This might be similar to someone asking, “pat your head and rub your tummy...and now choose what you want for dinner...now reverse, rub your tummy and pat your head” etc. The body pauses or slows down to accommodate for the new command between acts. I believe Jacquie’s resistance to the friction between realities canceled her ability to access the affective states that inspired my initial investigations of felt responses. Set choreography seemed to counter the improvisatory experience this environment enticed. Even in my explorations, the more limitations and parameters prescribed for the improvisational scores, the less I listened to my body. Kozel writes, “A dancer who interrogates her movement phenomenologically in the very moment of dancing attempts not to let reflection intervene and shape the flow of movement but knows that it will change the process, perhaps by making it more conscious, providing more depth. Performing a hyper-reflection while moving does not have to halt the process of movement; on the contrary, both can function through a state of flux” (Kozel 2008, 22). The tricky part seemed to be finding the right amount of information—including just enough parameters in the improvisational score to be able to maintain the state of flux that Kozel mentions.



Tara Lee Burns in *Extending the Body* at OSU's Arboretum North

By amplifying a hyper-reflective state, I'm able to respond, not only to the colors and different properties of the brushes, but the people walking by, the leaves crunching underfoot, the wind blowing, and the excitement of the event itself. The embodied practice that I created with *Tilt Brush*, is an exercise of listening to the body and the stimulus around you—being in tune with both the virtual and physical space. A call and response—I say, “Hey”, you say, “Yay”— is usually used to connect with an audience, but here, the visual trace of the paint and its distinct properties (such as the brushes, *Smoke* or *Neon Pulse*, and the unique sound each brush produces) are communicating with me as I create and move through other traces. Over time, I became more proficient in this practice. I remember a discussion in Viewpoints my first year about Kinesthetic Response being described as shortening the synapses between reactions. This is a similar process. It is a process of waiting and listening for the body to produce a thought, memory, image, or shimmer of something that cannot be represented in words and translating an instinctual response to movement while pressing the controller to produce a painted trace. Mapping and remapping the reactions of affect include not only a danced response

but a gesture—the press of a trigger on the controller— that produces the dispersion of paint. Once an impulse has created a visual trace, the process of responding and building upon it unfurls—a cycle of creating and responding. As if it wasn’t enough to respond to, each brush in *Tilt Brush* offers a unique movement: bubbles floating in a rhythmic cycle or neon streaks chasing their way through a carved streak. Once painted, the brushes and colors offer endless stimulation. To continue to engage in what Kozel describes as “hyper-reflection” requires staying in the moment.

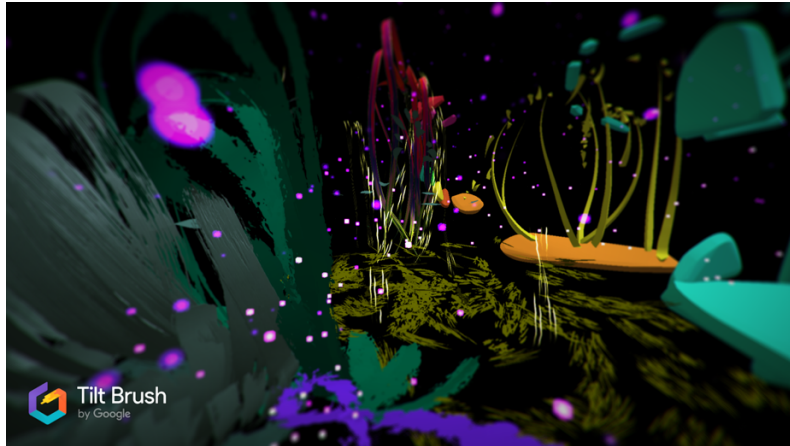


Bubble brush in *Tilt Brush*

In the limitations and anxiety that Covid brought, I shifted to solo home rehearsals and switched from the Vive VR system to the Oculus Quest VR. I began to revert to felt states that brought joy and created spaces that made me feel safe. I kept revisiting one improvisation in particular. A call and response, the call came from inside my body and the response came from the visual trace my body produced, but this improvisation was only one small piece of the work I had planned at the Arboretum North. Two weeks before the showing of *Extending the Body*, I

was still holding on to a complicated narrative of predetermined visual scores. Again, the complexity of remembering and transitioning subdued my felt reactions, imagined spaces, and affects in the body. When my advisors, Norah Zuniga Shaw and Valarie Williams, came to rehearsals I remember three things from their feedback: The outdoor grandness of the Arboretum made me look small, boundaries seemed important to me, and the way I interfaced with the technology was not performative (my words not theirs).

Changing directions, I began to imagine extending my body with hot pink elastic parachute cord to combat my small frame in the large outdoor area. With the new addition of these resilient supports, I was protected and also restrained, creating a boundary—symbolizing the resilient restraints of barriers: Covid, womanhood, motherhood—also a metaphor for technology and how it extends our bodies. The resilient boundary acted as the second person, the instigator of movement, the interrupter, and the physical realm that kept me safe and caged like Michelle for Jacquie. However, my performance suffered when attending to the interface in my hands. I was not in my body when I selected the blue oil paintbrush, because I was focused on what I was choosing. Like Jacquie, the complexity of tasks in the VR environment resulted in a change in state—a drop in the performative affect that is associated with the state of projecting energy. I needed to remember to perform and either incorporate these interactions into my movement score or stay with one paintbrush the whole experience like Einav Katan-Schmid describes doing in “Playing with Virtual Realities: Navigating Immersion within Diverse Environments.” I chose to amplify, repeat, and take time with the gestures used to select brushes/colors and allow their response to resonate in my body. Because of this change, I began to collaborate with the Oculus Quest VR system more wholistically and apply these methods to other computing systems.



An environment created in *Tilt Brush* using various brushes and movements.

To perform *Extending the Body*, I had to begin thinking about Virtual Reality as a partner instead of a tool. Norah and Valerie made it clear that the transitions between fluid movement and interfacing with the technology seemed disjointed and uninformed. At this point, it became clear that I wasn't making space for the technology. Thomas DeFrantz says, "Dance improvisers who work in the area of technology constantly face challenges of nonhuman interaction and the risk of mechanical failure." (DeFrantz, 1). By not listening to the mechanical failures, I was actually discounting the complexity of the VR system and what it had to offer the experience. Similarly, when creating *Monk's Mood* which used a computing system to trigger a digital archive, DeFrantz says they "needed to make more space for improvisation in its very structure. No matter the amount of dance improvisation set into the work...[it] felt too carefully arranged" (DeFrantz 2019, 7). Likewise, in *Extending the Body*, when I began to pare down the set parameters constraining felt experience, the composition shifted from attending to a construction of the space outside of the VR headset to an internal composition between myself and the VR system.

I found working with technology as a partner necessitates collaboration—a give and take that requires much of the same things a healthy human relationship would require. I trust that the technology will work (if it can) but have patience and incorporate contingencies for when it

doesn't. I treat flaws or malfunctions with empathy and flexibility, knowing that this is part of working in this environment. I have an interest in being resilient and compromising to find solutions that move the work forward instead of what I had originally envisioned. I have appreciation and respect for the device by researching and knowing its limits and my own within it. And I know that all technology (and humans) has room for growth and reciprocity. An example of the technology taking the lead and informing our reciprocal partnership includes how I practiced using the noises of the brushes in *Tilt Brush* to experiment with how they affect movement. In this case, I found that slower movements triggered the brushes to emit softer sounds and faster movements created louder sounds resulting in a distinct connection between tempo and duration within the composition of the movement. An important final requirement when collaborating with technology is practice. It was imperative that I continued to rehearse the use of the interface and reactions to the glitches in *Tilt Brush*. Implementing the improvisational score required physical thinking. Each rehearsal shortened the synapses between my affective reactions and the interface further training my body to dialogue with the technology in this new language we had created. When collaborating with the technology as if human, the dialogue we engaged in then informed how I chose to respond.

REVEAL, *moonshot: solos for your home*, and *a canvasUnBound* were all created as offshoots of the initial VR research to explore the themes of virtual and physical performance and affective qualities in different mediums. I began exploring alternate and non-traditional performance spaces and dissecting and re-imagining documentation, archive, and artifact as performance. What or where is the performance of a film? Can documentation, artifact, or archive be a performance? Through creating these components, I began to place the role of

performance on the viewer—their affective response as an act of live performance, like an echo.

REVEAL

REVEAL is an echo or a reflection of *Extending the Body*. It is filmed at the Arboretum, using the pink elastic cords and highlighting a segment of the soundtrack used in the original live performance that questions “Where are the boundaries of your flesh and who determines them?” It stays with the questions and pulls back the layers of time and space to reveal alternate realms of being. It is a film representation of myself—a gritty, out-of-focus, multi-colored, disoriented, place of questioning that Angela Pujolas beautifully embodies. Through an affective impression or “ghosting” (Carlson 2001, 53), I am positioning *REVEAL* as performance through residual affective and subjective responses in the viewer.

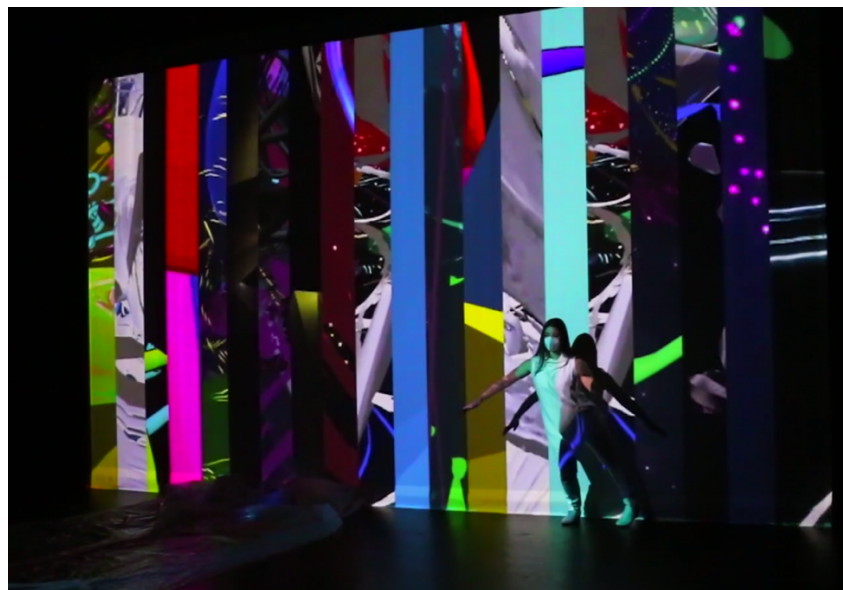


Still from *REVEAL* with performer Angela Pujolas

a canvasUnBound

a canvasUnBound is a performance with an interactive system including 20 panels of 10-second recordings that fade in and out in relation to a body’s coordinates in space. In an attempt

to recontextualize the memory of embodiment, I filmed and edited this archive from the 3D paintings in *Tilt Brush* created in the performance of *Extending the Body*. Performed in the Motion Lab, the panels stretched along the main projection surface and the top projector on the ground. I used a large piece of white plastic sheeting to extend from one section of the projection to highlight the floor projection and also use it as a prop later in the work. When performing with the system, I embodied the same phenomenological methodology I use in VR. I had a spatial score that unveiled over time when moving in the environment. At times I definitely felt immersed, especially when very close to the projection, the 3D environment that was recorded was palpable. But the same response and affective qualities in VR were not there in this projected environment—they were still 2D. It felt important to apply the phenomenological methodology from VR in a more traditional performance space. The result was residual, like memory, but also the creation of a new environment based on the history of the artifacts, the archive in the space. Moving forward, I will speak about *a canvasUnBound* in Alex Oliszewski's theater class on April 7, 2021, and perform in the Drake Film Festival on April 13, 2021, to further explore using an embodied practice made for a 3D space in the 2D realm.



Still from *a canvasUnBound* with performer Tara Lee Burns showing 20 panels

moonshot: solos for your home

moonshot: solos for your home is an Augmented Reality (AR) app that places a more than human entity (cyborg body) in the home of the user. The concept models for the piece were created through embodied practice in *Tilt Brush* from transparent prisms to create the 3D model for *moonshot's* posthuman representation. Transposing the concept model between *Tilt Brush* and *Maya* had some flaws. It is possible, but the poly count of the *Tilt Brush* model was too high, meaning too much processing power would be necessary to render them and make them visible and run smoothly in the application. However, with advice from Vita Berezina-Blackburn, I was able to come up with an alternate method of creating a 3D model that used similar visuals. Through the user interface created in Unity, *moonshot* places the 3D model and connected motion capture solo in the user's space. I am exploring audience as performer and archive as performance. The audience member becomes the performer by engaging with an AR entity in the space through watching from a distance, moving around 360°, or sitting immersed in the body of the soloist. The choreography and movement of the dancer were archived through motion captured choreography. By placing this danced archive in the hands of the user, I am questioning the essence of performance and exploring alternative performance venues. Moving forward, four people are scheduled to perform motion capture solos for this application in April 2021. The app will be modified to house multiple solos. I will collaborate with each of these choreographers to continue this investigation surrounding artifacts as performance and an application as a performance platform.



Still from *moonshot: solos for your home* through the lens of a Google Pixel 3

A cyborg body in the trees, a motion captured body placed in your home, a system that needs a body for interaction, and a body splitting the film in two: These works comment on the complexities of “cross-viewing” as described by Susan Manning in *Modern Dance Negro Dance*. Manning argues cross-viewing happens, whether we like it or not: “Spectators read theatrical constructs of blackness and whiteness in implicit and explicit relation to one another,” “spectators from different locations may view the same performance event differently,” and “some spectators may catch glimpses of subjectivities from social locations that differ from their own.” In all iterations, there is no right way to view the performances. In addition to Manning’s definition of cross-viewing, I provide complications in viewing experiences that may assist in the conversation between participants when sharing the differences between viewing experiences. For example, *moonshot* and *Extending the Body* give viewers control over their handheld devices which determines how they are able to and decide to view the work. *REVEAL* and *a canvasUnBound* lean toward a film presentation, however, as I prepare for my Hybrid Arts Lab exhibition, a web-based dissemination, there will be no cross-pollination of seeing/hearing a

different perspective other than one's own as components are watched. This demonstrates the downfall of disseminating material through a web-based platform without a live component.

To complicate this further, in the live showing of *Extending the Body*, the transmission of 3D rendered paintings had glitches that added to audience frustrations or misinterpretations of technological malfunction that may have discounted or interrupted the audience experience of the performance. This led me to a question that came up in Alex Oliszewski's class and also in rehearsals with Oded Huberman: Is it important for the viewer to understand how the body interacts with the technology and/or what is supposed to be seen? If you asked me a year ago if I thought the audience needed to know how the technology worked, for example, the fading in and out of *a canvasUnBound*'s panels, I would have said, "no." Since then, I have begun to consider adding in a choreographic moment of direct and clear interaction in the performance to show the user how the interactive system, device, or experience works. I want the experiences I create to be about more than just trying to figure out how the technology works. Perhaps if the audience is given a minute of clear connection between the body and the interactive system, they will be able to take in the experience and allow the affective qualities to arise in their own bodies.

Collaborating with the VR system required incorporating *all* of its limitations into the improvisational score. For example, *Extending the Body* was performed at dusk. The VR system requires light to track the user. Because of the shifts of light at dusk, the system would auto-re-calibrate during the performance which required me to re-draw the VR bounding box multiple times. The re-calibration was one of many conditions—I was in nature running everything from a hot spot on my phone and the transmission of the virtual world to the audience's phones was choppy and dropped out at times. By accepting these re-calibrations as expected and spontaneous moments to assimilate into my improvisational score, I was able to stay in a performative state

within my embodied experience. Accepting the glitches and pixelated misinterpretations of the computing system is no different than working with humans with equally important limitations. When working with dancers, I ask them to bring their whole selves into the room, so why not accepting all sides of the technology?

I now recognize the VR system as a partner in creation instead of a tool. When creating *moonshot*, the process was less embodied, but I was more malleable as a maker. As I tried different methods—converting a *Tilt Brush* model for rendering in *Maya*, fixing the distorted motion capture data, etc.—I resisted convention. In motion capture, not cleaning the data to fix a distortion is a faux pas, but what if the malfunction of the technology creates something striking. A twisted ankle or misaligned shoulder is not noticeable when the body is made of polygons. In addition, the “mistakes” in motion data provided contrast in the form of staccato spins and twitches. In this case, not holding myself to the conventions of how it is supposed to be done allowed me to adapt and create something I hadn’t imagined.

My resistance toward creating within a phenomenological methodology hinged on the deviation from the valued choreographic and compositional tools that I’d been taught to use. When performing each iteration, I continually questioned responding to my environment as a legitimate form of choreography. Where is the craft? Kozel might say this is because I have been conditioned as a dancer “to espouse movement that is somehow better, more skilled, or more meaningful than everyday actions” (Kozel 2008, 67). As a dancer in Norah Zuniga Shaw’s “Climate Gathering” (January 2019 – 2020), I also questioned reacting as a valid form of performance. I include this because it was profoundly transformative and validating; After many rehearsals and performances with Norah and LROD, I began to feel different, understanding the pull of different thoughts, sensations, feelings, and affects. There is value in practicing a

phenomenological method and noticing how it grows easier to tap into the connections of your being. Although Norah never specifically stated that her creative methodology was phenomenological, this experience relied on the affective states of our bodies in response to the affective states of the people, objects, and the room itself while performing. Unknown at the time, this experience transformed my thoughts around performance, choreography, and improvisation and influenced my explorations in VR. Jonathan Burrows says, “Choreography is about making a choice, including the choice to make no choice” (Burrows 2010, 40). I did, however, make a choice. I chose to listen, be present, and dance the unspoken by cultivating the quiet, focused, understanding between awareness and choosing to move.

Conclusions

This research challenges theatrical presentation of dance by investigating alternative disseminations through and with technology bridging site-specific performance, computing devices, and the reorganization and/or dismantling of traditional theater spaces. Part of this act of resistance imagines the future delivery of dance which can benefit from the iterative and choice-based ways ethnographic and autoethnographic methodology’s function. Using these approaches to build dance-based computing environments can only aid in accessing diverse groups. Thomas DeFrantz says in “CityScaped Ethnosphere” “landscapes don’t mean the same thing to everybody. Dance moves, are they really any different? Aren’t they just moving landscapes from a bacterium-eye’s view? A soul is wrapped up in the phrasing of those moves.” If a soul is wrapped in the phrasing of our movements, how do we translate these lived experiences through movement when using motion capture to collect data? How can computing environments be taught to collect not only visual representation but felt experience? How can we quantify sensation? It is through lived experience—sensations, emotions, and stories told—that we learn

to see the world differently. By inviting friction at the intersections of the body, technology, and normative societal structures, I aim to build performances and computing environments that challenge societies' use of current technologies and approach an embodied understanding of the world away from Western culture's bias toward Cartesian dualism.

Beginning was the hardest part about improvising in VR. What is the impetus to move when standing in a black void? Inhabiting an empty canvas—empty space. The space is the thing though. The space is the impetus. Gaston Bachelard states, "...we shall see the imagination build 'walls' of impalpable shadows, comfort itself with the illusion of protection—or the contrary... [We] experience the house in its reality and in its virtuality, by means of thought and dreams" (Bachelard 1969, 5). If the house is the black void of VR, then anything can be dreamed up or imagined there. Blank spaces are made for artists to inhabit, create, and make new. Embracing the possibilities in that black void made me wonder: What in this space, in this day, in this moment, am I here to do? That is where I began, tracing bodies and building shelters, and where I ended, with the black void as my shelter and the traces of my movement, pieces of my soul. An autoethnography of my movement in the conditions of my environment.

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